

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions
(formerly Eaton)

Brand: LUMARK

Report Number: P959410

Luminaire Tested: **NAV-SB1A-827-U-SL2-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P959410
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-11)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1A-827-U-SL2-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 80 CRI, 2700K, 350mA LIGHTSQUARE WITH 26 LEDS AND TYPE II SPILL LIGHT
ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3242.1 lumens
Efficiency: N/A
Efficacy: 104.9 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B0 - U0 - G1

Input Watts (W): 30.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT

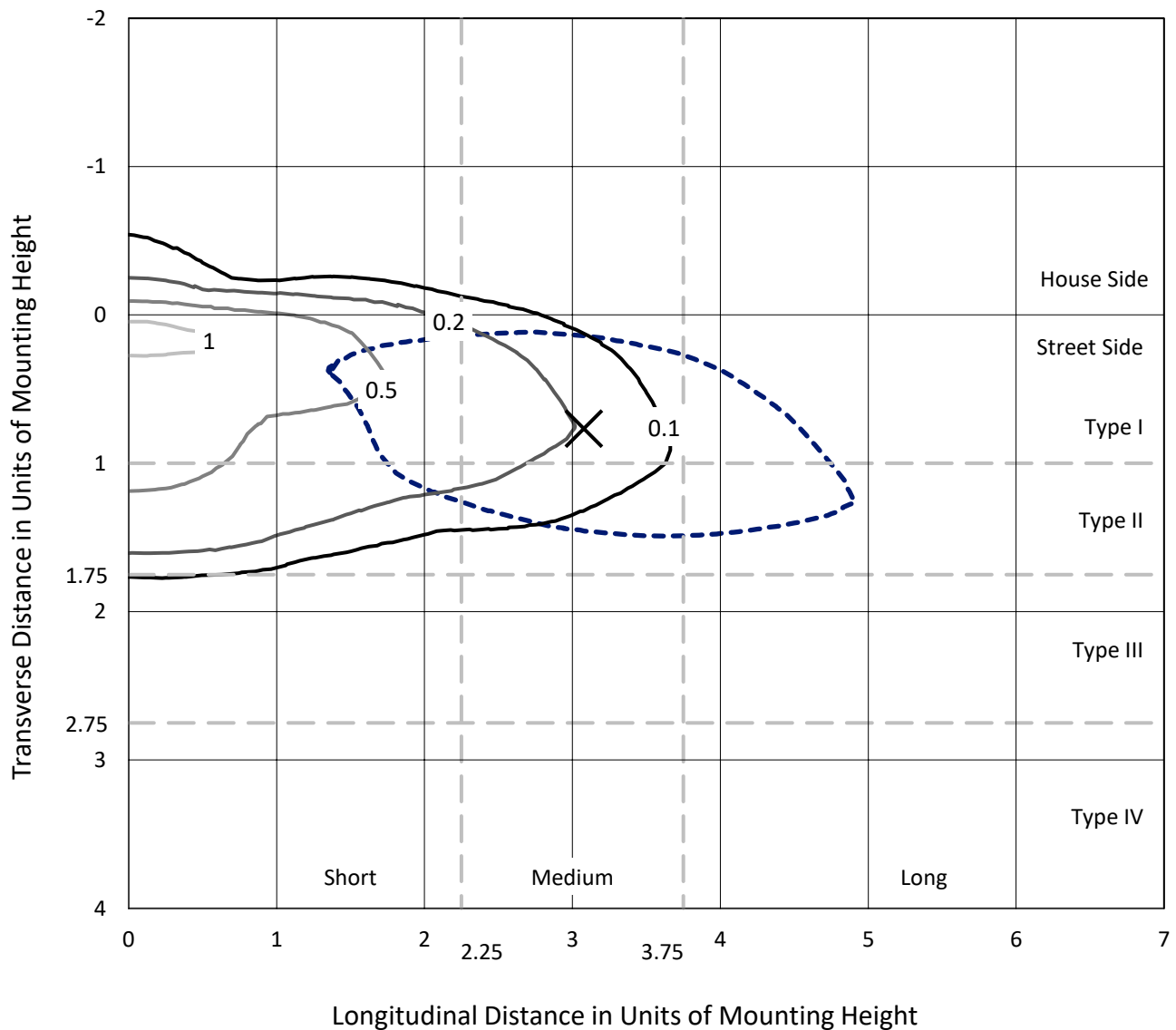


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Iso-Footcandle Lines of Horizontal Illumination

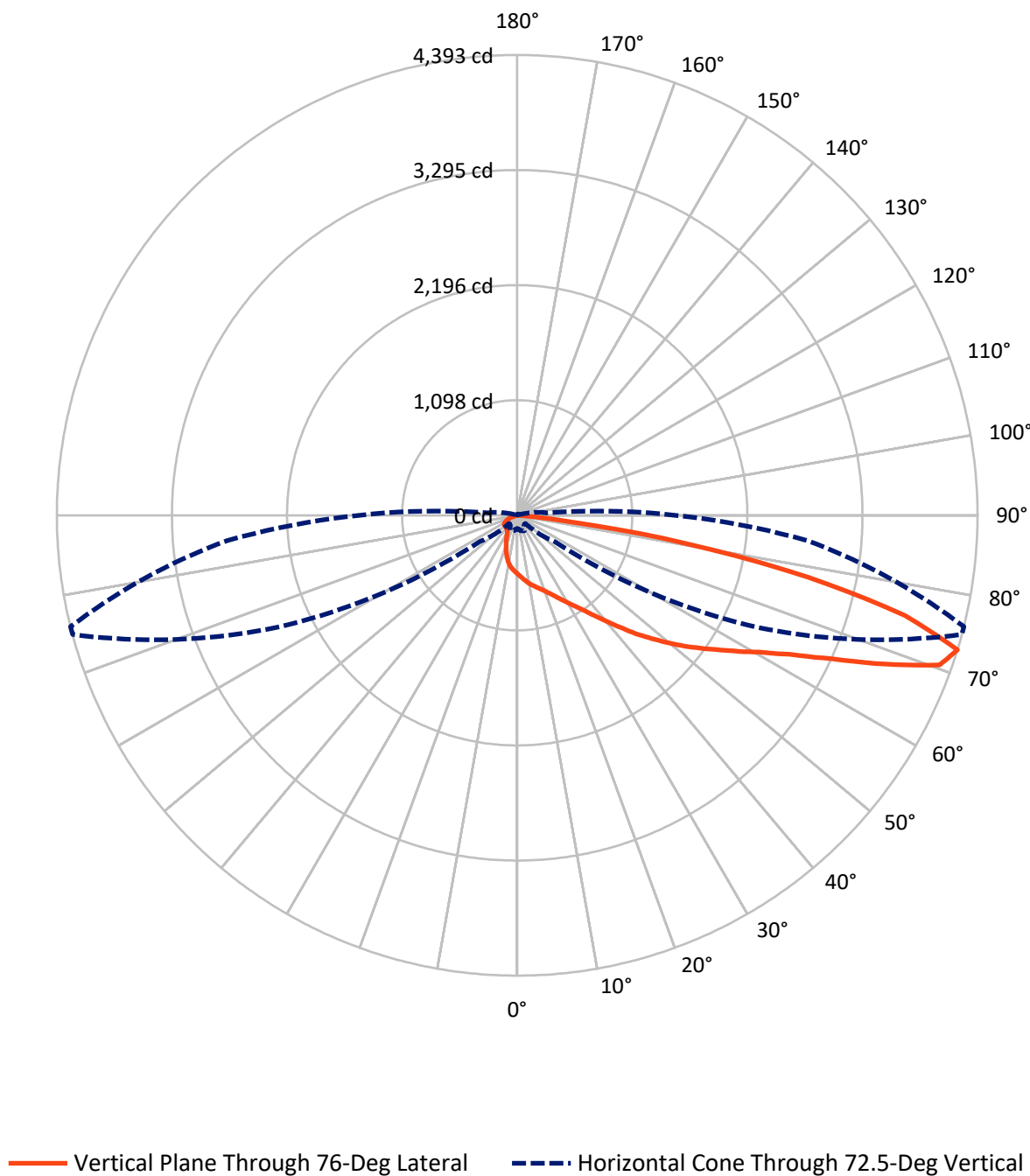
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.2 fc
Type II - Medium - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	331.8	0.0	331.8
	% Fixture	10.2	0.0	10.2
Street Side	Lumens	2910.3	0.0	2910.3
	% Fixture	89.8	0.0	89.8
Total	Lumens	3242.1	0.0	3242.1
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	51.0	1.6
10°-20°	136.6	4.2
20°-30°	216.2	6.7
30°-40°	334.6	10.3
40°-50°	508.2	15.7
50°-60°	700.5	21.6
60°-70°	740.1	22.8
70°-80°	507.7	15.7
80°-90°	47.3	1.5
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	3242.1	100.0
0°-180°	3242.1	100.0

Coefficient of Utilization



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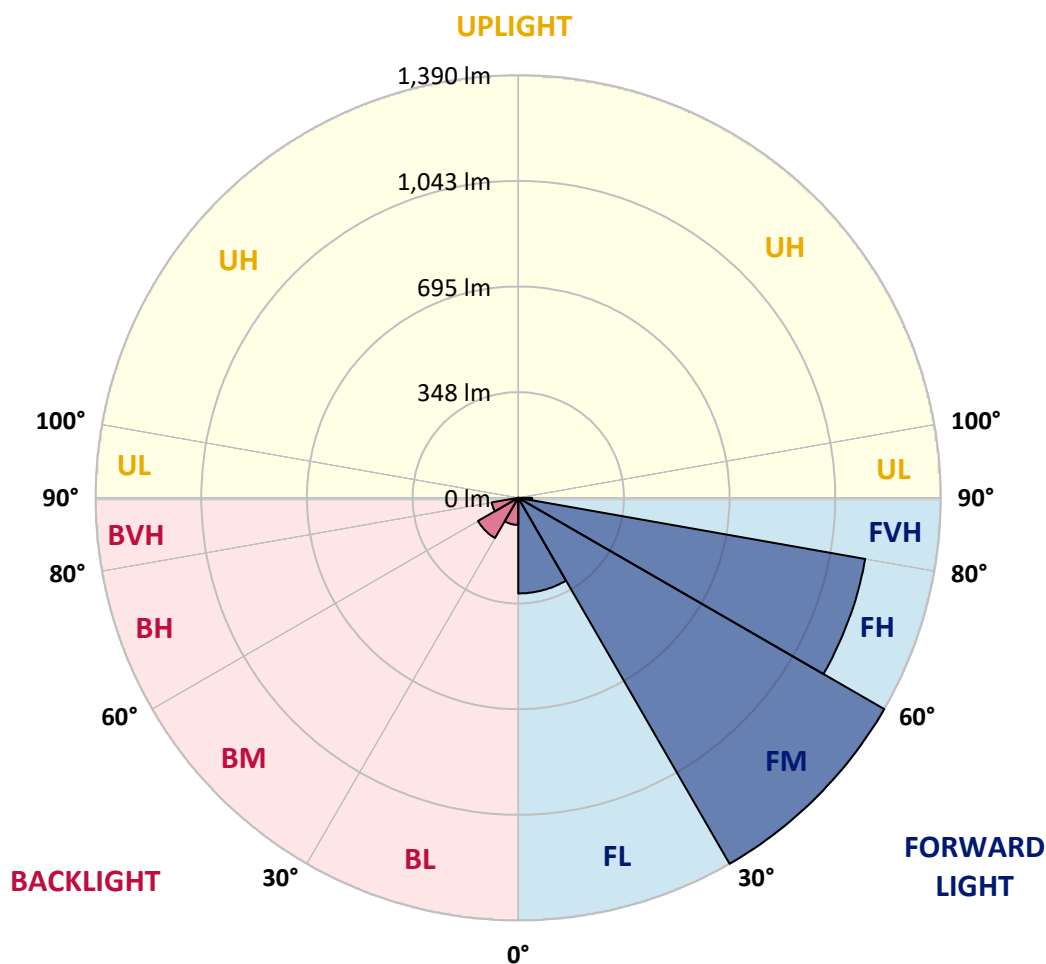
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	314.6	9.7			
FM	(30°-60°)	1390.5	42.9			
FH	(60°-80°)	1159.2	35.8			G1/1800
FVH	(80°-90°)	46.0	1.4			G1/100
BL	(0°-30°)	89.2	2.8	B0/110		
BM	(30°-60°)	152.8	4.7	B0/220		
BH	(60°-80°)	88.6	2.7	B0/110		G0/110
BVH	(80°-90°)	1.3	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B0-U0-G1

Type II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	560.3	560.3	560.3	560.3	560.3	560.3	560.3	560.3	560.3	560.3	560.3
2.5°	651.3	642.7	644.4	635.8	631.8	622.1	612.0	598.7	584.0	584.0	569.7
5°	719.9	714.4	714.4	704.3	696.5	681.4	663.3	640.0	612.2	609.5	582.3
7.5°	762.0	758.6	760.7	754.8	748.5	732.7	711.2	680.8	641.4	638.1	597.3
10°	770.2	770.0	775.8	777.5	781.7	773.7	754.6	719.4	670.2	665.4	610.1
12.5°	738.4	734.4	748.9	766.0	789.9	800.6	790.8	754.8	696.5	689.8	622.1
15°	686.2	687.1	701.0	727.2	767.2	805.4	818.3	789.2	723.2	715.2	633.4
17.5°	656.4	653.2	665.2	688.8	732.9	787.0	831.2	821.4	751.6	742.6	645.0
20°	652.8	652.6	655.3	666.0	699.7	760.4	829.6	852.8	785.0	774.6	661.6
22.5°	677.6	677.2	674.9	672.8	682.0	734.6	823.4	882.6	825.0	813.6	685.2
25°	715.7	715.0	711.5	698.6	689.6	720.7	817.4	910.4	872.4	859.8	713.8
27.5°	762.2	761.8	755.2	735.8	712.5	722.0	814.6	939.0	927.0	914.6	746.8
30°	819.2	818.3	804.8	777.5	747.0	742.0	818.6	971.2	984.0	974.6	784.8
32.5°	890.6	888.4	870.6	829.4	786.8	768.6	826.0	1004.2	1051.5	1042.7	835.8
35°	946.0	942.4	932.0	895.7	832.8	801.4	843.8	1043.3	1132.7	1124.9	900.8
37.5°	993.5	989.9	981.5	951.6	898.8	843.4	872.2	1095.5	1228.6	1224.9	980.0
40°	1044.8	1038.9	1034.9	1003.0	955.2	903.6	912.8	1156.5	1339.1	1339.5	1075.3
42.5°	1084.3	1082.0	1082.5	1057.8	1009.7	975.2	966.6	1225.3	1471.3	1475.3	1189.9
45°	1118.2	1116.3	1124.1	1106.9	1064.6	1022.1	1029.7	1303.1	1616.0	1624.2	1318.3
47.5°	1144.3	1146.4	1157.5	1146.4	1121.6	1055.1	1085.6	1386.9	1768.0	1769.2	1450.7
50°	1170.3	1171.2	1189.7	1184.3	1174.1	1097.0	1137.1	1480.8	1928.3	1930.2	1574.6
52.5°	1178.5	1177.3	1206.7	1220.2	1220.7	1148.7	1203.8	1583.0	2085.4	2091.5	1702.0
55°	1136.5	1140.1	1187.6	1242.3	1263.9	1220.2	1293.9	1712.4	2252.8	2255.3	1828.2
57.5°	930.8	950.6	1055.8	1182.5	1291.9	1322.7	1423.1	1863.6	2446.1	2443.8	1956.1
60°	564.9	588.5	714.2	991.8	1200.7	1425.5	1613.7	2097.8	2657.2	2650.8	2085.4
62.5°	315.9	323.1	363.2	593.7	913.2	1360.1	1799.8	2398.8	2940.7	2918.7	2212.7
65°	232.8	235.1	244.6	290.9	448.7	1046.1	1759.0	2758.6	3339.0	3299.7	2365.1
67.5°	202.3	204.6	213.9	220.2	200.4	549.5	1449.2	2958.1	3844.9	3793.3	2571.4
70°	170.4	171.6	186.5	190.8	143.4	209.0	931.0	2896.5	4313.0	4276.2	2792.9
72.5°	127.0	132.1	153.8	163.8	115.0	111.0	438.3	2532.6	4392.2	4392.7	2778.0
75°	86.2	90.8	115.6	134.8	88.8	77.8	176.9	1891.1	3824.7	3824.7	2435.2
77.5°	58.8	62.6	80.6	105.8	67.3	53.4	91.7	1200.3	2743.9	2840.4	1735.6
80°	26.0	28.4	52.0	76.8	51.1	34.4	52.0	657.2	1659.4	1639.0	680.4
82.5°	12.8	14.8	33.2	48.0	33.0	21.2	27.4	312.5	537.7	511.1	106.2
85°	2.6	3.4	17.8	20.4	15.4	9.4	10.4	96.1	64.8	74.0	22.5
87.5°	0.0	0.0	5.4	3.8	1.6	2.2	2.2	8.6	5.0	5.8	5.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	560.3	560.3	560.3	560.3	560.3	560.3	560.3	560.3	560.3	560.3	560.3
2.5°	562.1	554.3	537.3	520.5	503.3	487.5	476.5	465.7	458.9	455.9	456.3
5°	566.5	550.8	515.1	477.6	440.5	404.5	377.3	351.9	343.9	330.6	331.5
7.5°	573.5	547.9	491.5	428.3	368.3	315.3	277.0	246.5	234.3	222.5	222.3
10°	578.1	542.4	460.3	376.1	294.7	235.1	198.5	176.4	168.4	161.3	161.1
12.5°	580.0	532.3	424.7	317.3	229.2	179.2	157.3	147.0	144.3	141.8	141.8
15°	581.7	522.4	384.7	260.8	181.1	150.0	141.3	138.0	136.1	134.4	134.4
17.5°	583.2	509.8	339.0	212.0	152.9	138.2	134.0	130.4	128.9	127.0	127.0
20°	588.2	497.6	298.2	175.0	137.6	129.8	125.2	121.4	120.1	118.8	119.0
22.5°	597.7	487.7	258.7	150.0	128.3	121.2	115.2	111.0	110.2	109.4	108.8
25°	609.1	475.5	221.5	133.8	119.2	111.2	104.8	101.2	100.3	100.6	100.1
27.5°	623.6	462.1	189.5	123.4	111.2	102.0	94.6	91.9	92.4	93.2	92.8
30°	639.5	449.7	164.4	116.3	104.1	93.8	86.4	84.6	86.0	87.2	86.8
32.5°	663.3	438.7	147.0	110.6	97.8	87.0	81.2	78.8	80.6	82.2	81.8
35°	695.7	433.3	137.1	105.8	92.4	81.8	76.0	74.2	76.0	76.4	76.2
37.5°	735.4	432.9	132.9	101.8	87.2	77.4	70.8	70.2	71.5	71.8	71.3
40°	786.8	435.5	129.8	98.8	82.0	72.4	66.2	65.6	66.0	67.5	67.3
42.5°	851.8	446.9	125.4	95.0	76.4	67.3	62.4	61.0	60.8	62.4	62.2
45°	933.4	471.9	119.4	89.0	71.3	63.1	58.2	56.6	56.0	56.4	57.0
47.5°	1022.3	502.7	113.6	83.3	67.8	59.8	54.9	52.8	51.8	51.8	51.8
50°	1108.5	537.3	109.6	77.4	65.2	56.6	51.4	49.2	47.6	47.2	46.9
52.5°	1193.9	571.4	106.4	71.5	62.2	52.6	48.0	45.6	43.8	42.9	42.4
55°	1271.7	603.8	101.0	65.8	58.4	48.4	44.6	42.2	40.0	38.4	37.8
57.5°	1346.3	630.7	90.8	60.0	52.6	44.4	41.0	38.4	35.8	33.8	33.0
60°	1414.3	644.6	78.2	53.6	46.6	40.2	37.0	34.7	31.2	28.0	27.2
62.5°	1466.1	639.1	64.6	46.4	40.6	36.4	32.4	30.0	25.8	22.0	20.6
65°	1519.0	609.3	51.6	38.9	35.6	31.4	27.2	24.8	20.0	16.0	15.0
67.5°	1587.8	545.5	40.6	32.4	30.7	24.8	21.2	19.8	16.4	12.6	11.8
70°	1632.0	423.7	31.6	26.2	25.2	18.0	16.4	16.2	13.0	9.6	8.6
72.5°	1510.8	277.8	24.2	20.0	18.0	11.8	12.6	12.6	9.4	6.6	5.6
75°	1261.3	162.6	17.4	14.3	10.4	7.6	8.6	8.6	5.8	3.2	2.6
77.5°	900.8	86.6	11.6	8.8	5.2	3.4	4.6	4.4	1.8	0.2	0.0
80°	344.5	29.8	5.4	3.6	1.4	0.6	0.4	0.2	0.2	0.0	0.0
82.5°	52.6	7.8	1.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	9.4	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)